

NOAA Education Council Meeting

Date/Time: September 18, 2013 / 1:00–4:00 pm
Location: SSMC3, Room 14836
Dial-in: 866.901.0711
Passcode: 8134683
Contact: Lisa Nakamura (202) 482-3139, Sepp Haukebo (202) 482-9183

Adobe Connects Link to Meeting: <http://connectpro46305642.adobeconnect.com/edcouncil/>

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http://www.oesd.noaa.gov/leadership/edcouncil/docs/Audio_AdobeConnects.pdf

AGENDA

- 1:00 Welcome/Opening remarks - Louisa Koch
- 1:15 Co-STEM Update (*Informational*) - Louisa Koch (5 min presentation/10 min discussion)
- 1:30 WCM Seat for Weather Service on the Education Council (*Decisional*) – Christos Michalopoulos (5 min presentation/15 min discussion)
- 1:50 M&E WG: Status update on new outcome and output measures (*Input requested*) - John Baek (10 min presentation/10 min discussion)
- 2:10 Updates and announcements
- 2:30 Break (10 min)
- 2:40 CCEP-II: MADE-CLEAR - Maryland-Delaware Climate Change Education, Assessment, and Research (*Input requested*) - Nancy Targett/ sponsor Frank Niepold (15 min presentation/10 min discussion)
- 3:05 Climate Distance Learning Project partnership with National Forest Service (*Informational*) - Peg Steffen and Bruce Moravchik (15 min presentation/ 10 min discussion)
- 3:30 SOS Update (*Input requested*) – Carrie McDougall, Bob Hansen, and Maria Murray/ sponsor Christos Michalopoulos (10 min presentation/ 10 min discussion)
- 3:50 Walk to SOS room in SSMC3 Plaza
- 4:00 Adjourn in SOS room

Attendance

In person: Louisa Koch (LK), Atziri Ibanez (AI), Bree Murphy (BMu), Bronwen Rice (BR), Bruce Moravchick (BM), Chelsea Berg (CB), Carrie McDougall (CMc), Christopher B. Nelson (CBN), Christos Michalopoulos (CM), Dan Pisut (DP), Elizabeth McMahon (EMc), Eric Hackathorn (EH), Frank Niepold (FN), Jennifer Hammond (JH), John Baek (JB), John McLaughlin (JMc), Kate Thompson (KT), Judy Koepsell (JK), Kristin Anderson (KA), Lisa Nakamura (LN), Maria Murray

(MM), Marlene Kaplan (MK), Molly Harrison (MH), Nina Jackson (NJ), Paula Keener-Chavis (PKC), Peg Steffan (PS), Rochelle Plutchak (RP), Ron Gird (RG), Sarah Schoedinger (SSch), Shannon Sprague (SS), Stephanie Bennett (SB), Steve Storck (SSt),

On the phone/chat: Chris Maier (Chris), Tanja Fransen (Tanja)

Presenters/guests: n/a

Online presenters: Nancy Targett (MADE CLEAR)

Summary of actions and decisions:

ACTION: Submit any concerns about the GAO STEM survey to Lisa by COB MONDAY, September 23, 2013

ACTION: Education Council members that are interested in helping out with specific Co-STEM priority investments, please contact Louisa Koch.

ACTION: Education Council members that are interested in participating in this Smithsonian Waterways effort, please contact Christos Michalopoulos.

DECISION: Education Council approves the addition of a WCM seat to the Education Council.

ACTION: Education Council members that are interested in participating in a pilot for the common outcome performance measures, please contact John Baek.

DECISION (via online vote): The Education Council agrees to adopt the NELA/PISA environmental literacy definition (below).

“An environmentally literate person is someone who, both individually and together with others, makes informed decisions concerning the environment; is willing to act on these decisions to improve the well-being of other individuals, societies, and the global environment; and participates in civic life.

Those who are environmentally literate possess, to varying degrees:

- the knowledge and understanding of a wide range of environmental concepts, problems, and issues;
- a set of cognitive and affective dispositions;
- a set of cognitive skills and abilities; and
- the appropriate behavioral strategies to apply such knowledge and understanding in order to make sound and effective decisions in a range of environmental contexts.”

Welcome/Opening Remarks (LK)

- LK – We have a big crowd in the room today. As for opening remarks I want to start by saying thank you to Steve Storck who organized the vote on the environmental literacy definition. There was a unanimous vote in favor of adopting the proposed definition. It was clear in this process that the definition does not represent everything we do and there is still work that needs to be done to phrase what it is that we do.
- Leadership updates – Kathy Sullivan’s confirmation hearing is on Thursday, as such she has been meeting with a number of senators and has been hearing very positive things. The expectation is that she will be confirmed in the next couple weeks. Congress has still not come to an agreement on the budget so the possibility of a subsequent government shutdown as a result remains.
- The Government Accountability Office (GAO) has come back to run another survey with us. We are grateful to Bronwen for volunteering to pre-test the survey representing B-WET. We have requested a preconference to answer any questions you may have about the survey. One of the major questions is why, during the last survey, they placed all earth sciences in one bin and therefore climate, weather, and ocean education were considered as overlapping. We hear it is a different setup this year, so any concerns that you want us to raise with GAO, please get them to Lisa by COB next MONDAY, September 23rd.

ACTION: Submit any concerns about the GAO STEM survey to Lisa by COB MONDAY, September 23, 2013

- PS – Is OSTP going to come out with another inventory as well?
 - LK – I’ve been told that they don’t have the staff to do so but they may be told otherwise. They have now replaced the Michael Feder position.

Co-STEM Update (Informational) - Louisa Koch (5 min presentation/10 min discussion)

See presentation

- LK – If anyone is interested in helping out with specific Co-STEM priority investments, please let me know after the meeting, we appreciate any help. As a side note, P-12 is the Dept of Ed’s new way of saying pre-K through 12th grade; they now claim that Pre-K is in their jurisdiction. Peg is currently working with this group.

ACTION: Education Council members that are interested in helping out with specific Co-STEM priority investments, please contact Louisa Koch.

- OMB has told this group that they are planning to roll out the Dept. of Ed. and STEM 2014 budget initiatives again.

Slide 8

- CM – If anyone is interested in participating in this Smithsonian Waterways effort, let me know after the meeting and we can talk offline about this.

ACTION: Education Council members that are interested in participating in this Smithsonian Waterways effort, please contact Christos Michalopoulos.

- LK – Any questions?
- FN – All of these seem like smaller systemic initiatives. Compared to NGSS, which will be applied to schools across the country, these efforts seem very small and only test a single school. Is this a multi-year process where we pilot at a larger level every year until the next administration?
 - LK – This may seem small to some but depending on how this will be implemented, it could one day be much more dramatic.
 - FN – Are they saying that all federal education activities have to be STEM? Many times we have activities that aren’t STEM.
 - LK – Not necessarily, but let’s put it this way: if mission agencies want to talk to OMB about education, they better be talking about STEM and if they’re talking about STEM it better be in those priority investment areas. They have identified the areas that need financial contributions and the mission science agencies are being asked to contribute in those areas. As we saw in the OSTP priority memo, they EXPECT the agencies to be operable and contribute effectively in these areas.
 - PS – This effort may seem small but it is also a coordination effort to target these high need schools and to work better together on common goals. We’ve all been working in our own silos with specific goals and schools. I expect this coordination effort will grow with time and money.

WCM Seat for Weather Service on the Education Council (Decisional) – Christos Michalopoulos (5 min presentation/15 min discussion)

- CM - I did not put this presentation together alone, I had a lot of help from Steve, Chris Maier, and Tanja Fransen. As you know there is a formal recommendation to create a new seat in the education council representing the Weather Coordination Meteorologists (WCMs) from the National Weather Service.

See presentation.

Slide 6

- FN – You mention 26 FTEs in this slide but in my experience there are much more in attendance than just the WCM. People that are titled something else are in the forecast office and help out with school events. Is that an underrepresentation of the numbers?
- RG – The WCM is in charge of managing the program and they decide who will go the outreach activities.
- Tanja – There are more people that help other than just the WCM. The WCM does manage who goes.

Slide 7

- Chelsea – Is the specific ask for the national coordinator to be the representative?
 - CM – Tanja Fransen from the field would be the primary and Chris Maier who is the national coordinator would be the backup.
- LK – Tanja can you introduce yourself?
 - Tanja – I have a Bachelor's from the University of Northern Colorado in meteorology. My experience after that has been entirely on the job training. One of the projects Chris and I revamped a couple years ago was modernizing the SkyWarn program and the online training. This increased the capacity to train the local SkyWarn spotters. I am very passionate about education and working with the public and the communities that we have.
- KT - How many voting members do we currently have on the Council?
 - LN – We have 17 voting members including Louisa.
- PS – Tanja, are you a WCM? Would you be the POC?
 - Tanja – Yes, I am the WCM here in Glasgow, MT and I've been here 12 years and with the NWS for 19.
 - CM – If the vote is green then Tanja will be the WCM primary, she will participate from the phone and she will be a voting member. Chris Maier will be her backup.
 - PS – Do you have frequent meetings with the WCMs and have a good pipeline to the other WCMs to disseminate information and to get information back?
 - RG – There is a listserv that we use to communicate with the WCMs.
 - Tanja – There are some things, like the SkyWarn project, that Chris and I work on nationally. We have to maintain lines of communication for program updates and other pressing issues.
 - CB – B-WET has a similar structure with a primary field rep. and Bronwen is the backup.
 - KT – My only concern is that Chris is the national point and there is a lot of work when it comes to data calls, I would like to know more about how well the field WCM is connected to the national network.
 - LK – Kate is the lead educator for Sanctuaries and she has educators at each of the Sanctuaries and spends a lot of time on the coordination of those efforts. You also heard from Chelsea and she is the lead educator for Sea Grant and she spends a lot of time in that coordinating dialogue with Sea Grant. If you take the seat you would represent the WCM network and so that dialogue between you and the rest of the WCMs across the country and be speaking on their behalf. From a data collection standpoint we are already collecting most of the data, which would not be a new effort. Can you comment on your ability to coordinate with the rest of the WCM network?
 - Tanja – I am very confident in doing so and have the support of my supervisor and regional HQ support. Chris and I have been doing this for 4 years now with the SkyWarn project. There is a lot of coordination associated with that program. Chris is very responsive and we work well together on the national level.
 - LK – Chris, do you want to comment on this as well?
 - Chris – Thanks to Christos and the rest of the council for considering this. I want to emphasize our leadership's support. If the vote is favorable and we move forward with this, we would send out an "All Hands" message across the Weather Service announcing this change for Tanja. That would help jumpstart the process and answer some questions we have. There is already a lot of communication that goes on between Ron, Tanja, and I that will continue if we move forward.
- BM – Chris, what percentage of your efforts are focused on formal educator, going into the classroom? Also, in communicating with the WCM network, what is the level of interest in becoming involved in formal education sciences like NGSS and the evaluation work we do in the Ed Council?
 - Chris – As for the percentage of formal education, off the top of my head, we spend less than 5% in the formal classroom. In those instances we're helping out with existing curriculum as a guest speaker. Those are the things we track in our database in which we create an annual report to the Weather Service. Steve, any comment here?
 - SSt – Your work in AMS which is linked to formal education, your WCM network is very active in that correct?
 - Chris – That is another good example.

- Tanja – I work on the national level with AMS and the Board of Societal impacts over the last 7 years. With the education portion, the local offices work with the DataStream project so we aren't educating students but we are educating educators. There are a lot of offices that are working with that and there is a resurgence of DataStream as well. The teachers really appreciate being involved in that.
- RG – With our partners FEMA and RedCross, when they create education programs that they sometimes don't have the resources to go into communities, the Weather Service will go partner with them and do the majority of the school visits. The TV broadcaster also fills a significant role which the WCM has a very strong working relationship with. There are several little threads where they get involved in the community.
- SSt – The strength of the WCM network is in the non-formal side of education. Part of the mission is to work with science education in general. Weather is called out specifically 2 places in the NGSS framework and there is a good opportunity to benefit from that in the formal education community.
- CM – I like where Bruce is going with NGSS and what Steve mentioned is a good tie in, they can help us do some of the work that we're already doing.
- FN – When I was a teacher, part of the way I received my master's was through the AMS Datastream course. It is a nation-wide program that is partly funded by us and AMS. It is a very effective model.
- LK – Questions on the phone? No, then we'll go to a vote. Overwhelmingly yes. Welcome Tanja and thank you Chris for your work as well. This is truly something to celebrate.
 - Tanja – I'm honored and look forward to working with you all.

DECISION: Education Council approves the addition of a WCM seat to the Education Council.

M&E WG: Status update on new outcome and output measures (Input requested) - John Baek (10 min presentation/10 min discussion)

- JB – This is an update on the M&E.

See presentation

- LK – So this works better on an individual basis, like with one brave Teacher at Sea or Sea Grant educator.
- JB – It will eventually work to be scaled across the network but for now we're dealing with narrow measures. For instance with each Climate Steward webinar we may need different measures.
 - PKC – When you mention PD are you talking about teacher PD or educators more broadly, like informal educators?
 - JB – For BOAT we specifically chose informal educators because we did not want to get locked into formal education. If there are any formal education pilot volunteers we can work with them too.
 - LK – Thank you John.

ACTION: Education Council members that are interested in participating in a pilot for the common outcome performance measures, please contact John Baek.

Break

CCEP-II: MADE-CLEAR - Maryland-Delaware Climate Change Education, Assessment, and Research (Input requested) – Nancy Targett/ sponsor Frank Niepold (15 min presentation/10 min discussion)

- FN – I'm pleased to have Nancy with us today. There are 6 CCEP projects and this is our first opportunity to present the council.
- Nancy – I appreciate this opportunity to present today.

See presentation

- LK – It's good to see Sea Grant providing leadership here.
- Nancy – They have been great.
- LK – How do you feel like you connect with the environmental literacy requirement in Maryland and the effort to implement that systemically?
 - Nancy – They have done a good job of centrally implementing this requirement as well as NGSS. That is where we are trying to weave in our work; we want to be a big part of that.
- SSp – As far as getting into the schools in Maryland, I'm not sure if you're familiar with the Maryland Environmental Literacy Partnership co-chaired by the Chesapeake Bay Foundation but they are working with half of the school divisions to develop pathways to meet those requirements. That is the area where we push people to dig in the most because it will have the broadest impact in Maryland.
- SSt – I noticed on your logic model and you have the same approach as we have. You emphasize the deepening of students' understanding of climate processes but you focus mostly on educating the educator. Is part of your evaluation plan to assess if this is the most affective model?
 - Nancy – Part of the evaluation plan does assess what students know pre and post exposure to the learning progression.
 - SSt – That's great because we generally do not measure that and would be interested in finding out more from that report.
 - Nancy – We want to know what our baseline is and if we have made a difference at every step along the way.
- SSp – This summer there were a series of workshops that focused on NGSS and several NOAA people presented at those. It has now been kicked back to the school divisions so they can grapple with what they have learned and to develop specific plans for assessing NGSS. Next year we should have more information.
 - Nancy – I heard you mention Bart's name and we work with him a lot. But I want to make sure that we are in touch with him and that we're not duplicating our work but leveraging the proper assets.
 - SSp – Absolutely, we're happy to make that connection.
- FN - If there was someone from the council that wanted to engage with you what would be the best way to do that?
 - Nancy – Marcus Griswald is the project manager and he can point anyone to the right person. You can also contact me or any of the other PIs.
- LK – Thank you Nancy.

Climate Distance Learning Project partnership with National Forest Service (Informational) - Peg Steffen and Bruce Moravchik (15 min presentation/ 10 min discussion)

See presentation

- SSt – Which office of Forest Service is funding this?
 - PS – Conservation.
- PS – If you have questions or input you can contact any of us.
- LK – What has NOAA already contributed to this and what are your top priorities for contribution from Ed Council members?
 - PS – Bruce and I have committed a lot of time for planning, feedback on the website, content of the webinars, rubrics for the grants. As for content, there are a lot of options for what you can add. This will be a well-traveled site. If you have climate related materials, we are happy to work with you to include those.
 - BM – I also have a list of things that Forest Service is specifically looking for and would be happy to send those out the Ed Council.
 - LK – That would be helpful for us to know what subjects they are interested in. We also have the Climate Portal, how do these two connect?
 - PS – This is targeted mostly to students. They're looking for interesting videos with students in them and materials for younger students.
 - BM – It is a 5th or 6th grade reading level maximum.
- FN – I see there is also a teacher section. Would we work with you on that?
 - PS – We can work with you on that. We're also looking for some materials that Sea Grant has.
 - JM – GLOBE recently did a campaign on climate that hosted several student videos, would that work?
 - PS – Yes.
- PS – They are really interested in how the kids can help move on action, what can they do about their carbon footprint.

- SSt – This is all about our goal 2, so I am excited. The Prince Williams Network is great, Hands on the Lands has done some neat work with them and we may want to be engaged with the Prince Williams Network in the future.

SOS Update (Input requested) – Carrie McDougall, Jeannine Montgomery, and Maria Murray/ sponsor Christos Michalopoulos (10 min presentation/ 10 min discussion)

See presentation

- FN – It would be great if we could finally get a sphere-casting program set up.
 - DP – If we are truly interested in this we need to know what kind of datasets are needed so we can start working on that now, a few months before the program would be initiated. Right now there is no weather model dataset for sphere-casting.
- AI – We would like to have a coastal dataset that truly tells our story well, I have not seen that yet.
 - MMu – Thanks Atziri, we definitely want to build this community so that we can determine needs just like that. We want to build stories that are usable by anybody.
- MMu – What would you like to see at the SOS in Silver Spring?
 - KT – Live NOAA data would be great. How does the current data look compared to past data? Sphere-casting would be neat especially if you could have live feeds on that. Our network would use that a lot.
 - FN – We have unified datacalls coming and I see this as a great way to increase our NOAA outputs. This is a great way to leverage 99 other spheres without large monetary grants. If we could do this weekly or even bimonthly without incurring additional costs, that would greatly increase our numbers.
- NJ – Is there a charge to get in or to use the room?
 - MMu – There is no fee to use it during the day but there is a fee to use it outside business hours.

Updates and announcements

- AI – Stephanie Bennett and I are the primary people working for the new Coastal Office. As of October 1st we are officially an office. There will likely be a lot of changes soon but there are a lot of opportunities that have arisen as well.
- CM – When will someone be able to present to us the new org chart?
 - AI – We should be able to after November.
- FN – We are beginning to move forward on phase 3 of the portal, Climate.gov. One of the major pushes this year is marketing and syndicating partnerships. There is also an upcoming meeting for the tri-agency PI's on Climate Change Education. It is an important meeting for exploring new partnerships. I highly recommend it to any that are interested in attending.
- KA – Kristin from Leg Affairs, we just had a meeting with Christos, Lisa, and Louisa to plan a proactive approach to the FY 15 rollout. We did a series of briefings prior to FY13 rollout that we thought were effective. While those were not last minute, we still think we could take an earlier approach to meeting with key ocean champions on the hill. We are also looking at some near-term field briefings where we can show this coupling of NOAA education/outreach with the science. We have had a few already at Chesapeake Bay and they have made a great impression with the target congressionals. We're also looking forward to the SOS grand opening, we've slotted a few members from committees and a few other ocean champions like Sam Farr and Lois Capps. We are also excited to use the sphere as a briefing tool.
- KT – Our criteria to create new site nominations has been closed since 2002 and NOAA/DOC may allow us to open the process. We had 75 groups comment on the criteria and we hope to have the proposed rule finished by January for the public to designate new areas for sanctuaries. Also, Cathy Sakas with Gray's Reef is retiring so we will now have 3 sites without educators because we are not allowed to rehire.
 - CM - Can you backfill with contractors until you are able to fill those positions?
 - KT – If we had any money to backfill but that is not an option now.
- PS – NOS gave out a grant to the National Earth Science Teachers Association to work more closely with their communication networks and opportunities. We'll be convening a group that would like to populate their website, journals, and newsletters over the next year. It's a great way to get NOAA material on their popular website, Windows to the

Universe. Also, I'll be leaving this group for a while next year. I've been given a State Department Science Fellowship to go do climate education in Vietnam. That will be for about 3 months around the beginning of the year.

- BM – With Climate Stewards we distributed 18 mini-grants over the summer engaging in stewardship projects across the country.

- MH – For Teacher at Sea, the call for proposals just went out, please distribute that to your networks if you can. We'll also have our second TAS workshop for Mid-Atlantic alumni during the second week of November here in Silver Spring. .

- DP – We're getting ready to roll out our NOAA View Data Portal starting October 1st. It is a global dataviewer for 50 datasets across NOAA and that is in full archive form with the option for several different time steps. We're also working on some content for Secretary Kerry's Ocean Summit at the State Department. We're focusing on ocean acidification and marine pollution/debris as well as fisheries resilience. He has requested Science on a Sphere and briefings which we will show off to many of the delegates at that summit.

- SB – In the Pacific we've been working hard on this curriculum for grades 3-5 and we've worked a lot on teacher PD. We also released our iBook on marine debris.

- SSp – NAAEE is in Baltimore this year. A lot of the mid-Atlantic crew is working to highlight their efforts.

- CB – Knauss recruitment is out, if you interested in hosting please let me know. I also took on the role as the NOAA-Smithsonian Ocean Portal liaison and may need help as I get more in to it. Sea Grant also has a brand new website so check it out.

- BR – Our evaluation project is ready to enter the data collection phase, Qualtrics is set up and ready for grantees.

- JMc – We are awarding one award this year through ELG, the Visualizing Change project. Also, in regards to our citizen science community of practice, we have rolled out our collaborative Google site and have an orientation webinar scheduled for two weeks from now.

- RP – We are convening the Exploratorium – NOAA partnership later this week. The first 5 years of the MOU are up next summer so we are working on the renewal.

- JK – We used to have a working group on climate and we were working on bringing climate down to the elementary level, I have finished that and it is awaiting approval from my supervisor.

- SSt – We are involved in the Lego League Challenge, a robotics competition that also has a research component. The focus is on Nature's Fury. OAR did a kickoff event two weeks ago. We're getting lots of kids asking our scientists for help so if you're interested in assisting just let me know.